August 7, 2014

Flip Charts for Oil Transportation Expert Panel – Marine

Risk

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- Increased vessel traffic/changing cargo patterns
- Unknown product type – what kind of vessel will move it? Type of crude – safety
- Vessel collisions due to increased traffic
- Oil spills to Columbia River – increased traffic
- Oil spills at facilities – increased traffic
- Columbia River drinking water
- Lack of emergency responders
- Time for drills, exercises and training
- Tug service - best equipment; GH more and better gear
- Economics – cost of a spill
- Accumulative amount of vessels
- Types of product
- Jurisdiction
- Economic impacts in GH
- Resources – enough to ensure prevention and response?
- Communities
- Orcas
- Clean up and the products used for it

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- Treaty reserve right to fish
- Salmon production (new and chronic)
- Shellfish
- Safety of fishermen
- Increased vessel traffic
- Awareness of resources on Columbia River for response
- Mutual aid – both sides of the river and BC/Provinces
- Awareness of vessel traffic patterns – capacity and availability; provide stats
- Need to understand current safety regimes i.e. increased traffic …? Appropriate context: increase vs. change
- Need consistent, accurate data. I.e. volumes and types of product. Data confirmed by whom?
- Can't base trends on 2 years of data
- Domestic export of product to California
- New exposure of product to GH w/ no prevention program

- Boom or not Bakken. Clarify approach.
- Regulatory challenge – Canada/US
- Increased transit of product/oil on water regardless of volume
- NWAC's report regarding response to Dilbit
- ATBs not subject to Rosario rules

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- Areas w/ biological areas need studied
- Inconsistent GRPs in GH = slack water and pre booming
- Need clear understanding of each agency/organization's role
- Resource Trustees; culture influences requires comprehensive planning perspective to ensure awareness of ALL risks. Affects all of us and collaboration is key.
- Actions must embrace tribal values in all done. Public, health, safety, and environmental lenses must consider
- Focus on facts, not speculation
- Worst-case scenario analysis?
- Foreign-source oil account in oil movement equation.

<u>Vessel Overview Comments</u>

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- Information determines how to best share initial draft findings and potential options
- Determine regards OTX to boom or not Bakken. Clarify approach
- Inerting of barge traffic
- Tug/rescue tug, evaluate correctly, do not dismiss
- Be careful to characterize tank vessel will decline due to pipeline and CBR
- Human error – key area to prevent accidents and spills

Risk Mitigation Measures

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- Tug and barge – important if vessels increase in various locations … Columbia River
- Transboundary shipping summit; look at VTRA study area
- Question: Bakken flash point – determine properties use worst-case scenario? Need solid chemical data guide
- Finalization and publication of 46 CFR sub chapter M rulemaking
- Interagency cooperation … highlight HSC's voluntary standards
- Mariner fatigue mitigation measures for pilots work - OBP
- Columbia River IS monitored for vessel traffic, (system name?…37) - OBP
- Columbia River different from other waterways … WA rep needed for OBP

- Regional Pilots Idea
- Vessel traffic may decrease but still get congested in certain areas
- Significant training, simulation, in place for pilots/escorts
- Test the pilots … cockpit management idea; train above standards
- Study fatigue and have expert on board – p0ilots
- Focus on facts
- Speculation on crude export

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- Cause of spills; accumulate data for study. Collisions and groundings not most likely
- Use VTRA – recognize this is a cooperative effort with Canada
- Continue to be proactive
- Public disclosure – share info
- Take actions despite gaps – do things we can do now
- Site-specific vessel increase if proposals go through (GH, Puget sound and Columbia River … regards tank vessels)
- Continued pride in safety. System of prevention in marine significant
- Use VTRA risk analysis? (Findings in background for study)
- Bunkering – consider impacts with decreasing traffic – Gateway bunkering, restriction risk mitigation. Provide public data on bunkering … where
- Don't assume changing vessel traffic patterns equate to increases in vessel traffic. (Fewer ships but larger vessels?)
- Strength of marine regime – 60 years of oil movement
- 2 pilots (BC) addressed fatigue
- Not all ATBs licensed to carry crude
- 3 spills in 10 years; no spill from '72, cargo vs. LS; caution on comments about reducing risk
- HSC and standards of care – good voluntary example
- Continued vigilance looking at new risk and mitigation

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- Data is better characterization than speculation use incident data; not oil spill data
- Consider lift of export ban of crude oil
- Barging dilbit Vancouver to Tacoma
- Coastal VTRA needed – Col. River to Puget Sound
- Manning requirements and fatigue
- Speed limit affects spill risk reduction
- Tug escorts/Rescue tugs – PS, GH, CR
- LNG approved- tug escorts
- Col. River VTRA needed
- Anchorage issue – capacity and bunkering Pt. Angeles

- C G reducing navigational aides – moving to synthetic and virtual aides
- Cargo tank inerting for barges
- VTRA model max mitigation
- Safety of fishermen in Col. River, GH, and Puget Sound including commercial, tribal and recreational. Work with fishing groups regarding bulk oil traffic including Anchorage, etc.

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- VTRA - good info, needs to look at larger region
- Severe weather – important to look at
- No laurel-resting! Continually stay in practice, review methods at all levels
- Use lessons learned
- Complacency leads to disaster
- Operation Make Way on Col. River – work with fishing vessels
- Use existing safety management systems and continue to review, adjust and improve
- Consider role of pilot boards WA/OR. Role in risk mitigation, state reps WA/OR joint
- Analyze VEAT and ID'ing environment prioritized attention
- Quileute, Quinault and Ho Tribes push for expanded VTRA
- Jones Act – rescue tug and spill response looked at? Foreign vs. US tugs at cost savings